

## ABSTRACT

A novel polypeptide, a polynucleotide encoding the polypeptide, an expression vector comprising the polynucleotide, a cell transfected by the expression vector, a method for producing the polypeptide, and a convenient screening system for obtaining a substance useful in treating cell injuries due to postischemic reperfusion or an inflammatory disease, are disclosed.

The polypeptide is a potassium-dependent sodium-calcium exchanger expressed in peripheral leukocytes.